

1726 Old Burying Ground Preservation Master Plan

Stoneham, Massachusetts



prepared by

Martha Lyon Landscape Architecture, LLC

with

*Monument Conservation Collaborative, LLC
CME Associates, Inc.*

June 2012

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and...

The citizens of Stoneham, past, present and future.

INTRODUCTION

The Old Burying Ground, established in 1726, is the oldest extant place of interment in Stoneham. Its first known legally recorded burial took place in 1728, just two years after the establishment of Stoneham as a township separate from Charlestown. For over 100 years, the 1.09 acre rectangular parcel, located at the intersection of Pleasant Street, William Street and Oriental Court, served as the only burial place in Stoneham, and it was during this period that the Old Burying Ground received a majority of its interments. Burials began to slow when the Town established the Stoneham Cemetery (across William Street) in 1844, and the large Rural Cemetery Movement style Lindenwood Cemetery, in 1861. After the opening of the two larger sites, less than 40 interments took place at the Old Burying Ground. The last recorded burial took place in 1924.



The Old Burying Ground was established in 1726 and is Stoneham's oldest known place of interment. It served as the Town's only burial site for over 100 years.

The Town of Stoneham has always assumed responsibility for the Old Burying Ground's care, and over its near 300-year history, has received only a few modifications, with the most significant changes occurring at two points in time. First, in the early 1800s, the Town granted permission to build tombs on the property, and as a result, two private tombs, separated by a Town receiving tomb, appeared along the northern edge. In the mid 1800s, likely in conjunction with the widening of Pleasant Street and construction of Oriental Court, the Town blended the tombs into a new mortared stone retaining wall that rimmed the north and east sides. Second, beginning in the 1930s, the Town commissioned a series of efforts that "modernized" the Old Burying Ground, compromising its historic Colonial character. Copper caps, applied as a means of protection from the weather, were added to the tympana (tops) of many of the slate grave markers. The Town also constructed a chain link fence around the entire property. Both modern additions remain to this day.

An attempt to bring greater awareness to the importance of preserving and protecting the Old Burying Ground began in 1984, when the property earned a position on the National Register of Historic Places. In 2007, an Eagle Boy Scout project resulted in the beginnings of a comprehensive gravestone inventory. Regardless of the success of these efforts, the Town of Stoneham lacked a detailed plan for preserving the Old Burying Ground landscape, including an assessment of its natural, built and functional features. In 2011, the Stoneham Historical Commission applied for, and was awarded, a grant through the Massachusetts Historical Commission's Massachusetts Preservation Projects Fund to undertake this assessment. The result is the foregoing *1726 Old Burying Ground Preservation Master Plan*.

Project Goal

The goal of the *Preservation Master Plan*, as defined by the Stoneham Historical Commission, was to compile a complete inventory and assessment of the Old Burying Ground's natural, built and functional features, and make specific recommendations for preserving and managing these features over the long term.



The Town receiving tomb was constructed after 1845, when Town Meeting voted to approve its construction. The assessment of its condition and recommendations for its preservation were two objectives of the plan.

Program of Improvements

The Stoneham Historical Commission identified the following program of improvements (objectives) to be included in the *Preservation Master Plan*:

- to provide a step-by-step guide to preserving the Old Burying Ground over time including treatment of its gravestones, structures (tombs, walls and fencing), trees and other vegetation;
- to explore alternatives for making the burying ground more accessible to persons with all levels of physical ability (ADA compliance); and
- to explore options for engaging volunteers and for private contributors to make improvements.

The OLD BURYING GROUND LANDSCAPE in HISTORY

Beginnings – Before 1726

The origins of Stoneham's Old Burying Ground date to the early 1700s, and to the official establishment of the town. As early as 1645, European settlers came to what was then known as "Charlestown End" to set up farms. Dean's 1870 History of Stoneham claimed that one of the first settlers was a member of the Holden family, a clan that included four brothers who came to America in 1640 from Suffolk County, England. Richard Holden settled in the northern part of Charlestown and his descendants remained in the area for several generations. Other early settlers included Nathan Bucknam, Thomas Vinton, Benjamin Gerry, Jonathan Green, Daniel Gould, and a Scotchman named Peter Hay.¹ Before 1725, Charlestown leased lands in Stoneham, and on this acreage settlers established farms, mills (on Spot Pond), and small industries including weaving, shoe-making, masonry, carpentry, and blacksmithing.

By 1724, approximately 250 individuals lived in Charlestown End, but continued to attend meeting houses in Charlestown and South Reading (to the north).² In the following year, 54 men petitioned the General Court to set off an area as a separate town. On December 17, 1725, "[t]he northerly part of Charlestown, including all the lands lying on the east side of Woburn, the south side of Reading, the west side of Mallden, and the north side of the fifth range of the first division of Charlestown woodlots were set off ... and constituted a separate township, by the name of Stoneham." The General Court also required the inhabitants of Stoneham to erect a house of worship, procure and "Learned and Orthodox minister," and provide for a school-master.³

Establishment – 1726 - 1758

In January of 1726, the Town voted to choose a committee to see and inquire for a place for a minister's house and meeting house and place for burying, and to make a report to the next Town Meeting. Town records indicate the committee chosen consisted of Captain John Vinton, Daniel Green, and Timothy Holden, Sr. In March, the Selectmen voted to provide for the Town burying place, in a location most convenient to the Town, and in July, a vote was taken to "rescue" the deed of the land of the meeting house place and burying place. The land was acquired from James Hay, who sold two parcels, the Meeting House Lot (one acre and a quarter wanting ten poles), and the Burying Place, for 13 pounds, 5 shillings.⁴ It was described in the deed lying "on the Plain near a bridge on the West side of it by a Steep Hill in said Hay's land."

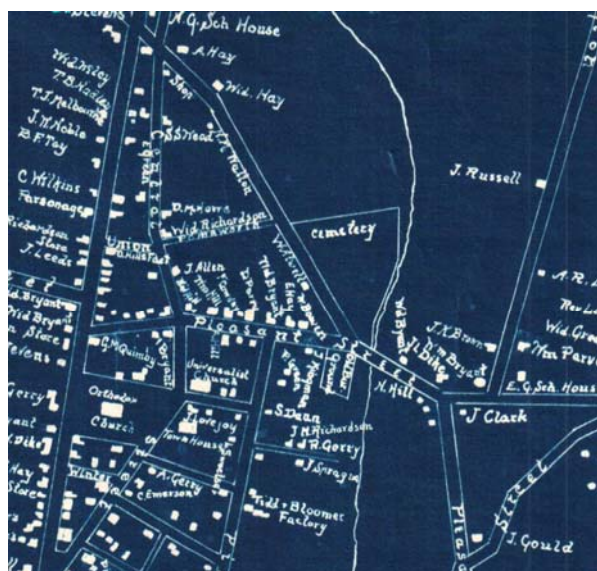
¹ Dean, Silas, A Brief History of the Town of Stoneham, Mass., from its first settlement to the year 1843, pp 3-4.

² Essex Institute, The, Vital Records of the Town of Stoneham to the End of the Year 1894, 1918, pp. 1-2.

³ Stevens, William B., Esq., History of Stoneham, Massachusetts with Biographical Sketches of Many of its Pioneers and Prominent Men, p. 37.

⁴ Cambridge Registry of Deeds (book 66, page 493).

The first known legally recorded burial, that of Timothy Wright, took place at the Old Burying Ground in 1728.⁵ The inventory of gravestones, prepared as part of this plan, documented 25 existing burials from the Old Burying Ground's first thirty years of operation.⁶ Most were located in the northern half of the property, indicating that the earliest part of the burying ground stood near the Pleasant Street edge. Each of the graves is marked with a tympanum-shaped slate tablet, and the burials stand individually, rather than in larger family plots.



The first known map to show the Old Burying Ground was created in 1858 by Robert Gerry, a nearby landowner. Gerry created the map before Oriental Court was added to the Burying Ground's east side.

Expansion – 1758 – 1860

In 1758, the Town added land to the Old Burying Ground. On May 24, 1758, a vote of the Town raised and granted three shilling and four pence to pay for acknowledging and recording a “deed of Stoneham burying place.”⁷ The land was a gift from James Hay. Judging from the property description as well as the dates on the gravestones, this parcel appears to have been added to the south (and possibly west) side of the existing site. In 1773, Town Meeting voted to make a board fence on the north side of the burying place, creating a clearly defined edge.⁸

In the late 1700s, Stoneham's population remained small, with 340 inhabitants in 1765, and 380 in 1800, but by 1850, it had grown to 2,085. Likely because of the expanding population, deliberations began as early as 1828 over expanding the burying ground. Town

⁵ Timothy Wright may not have been the first burial. In Stoneham 200 Years Ago, Wilton F. Bucknam reported that a 19 year old child of Jacob Howe was the first white person in the Old Burying Yard on Pleasant Street, however there is no death record of Howe child in Stoneham's vital records.

⁶ This number is approximate because (1) inscriptions on several of the stones were illegible; (2) it is possible that some grave markers dating this early period have been remove;, and (3) burials from this period went unmarked.

⁷ The Cambridge Registry of Deeds (book 66, page 497) stated that James Hay gave an additional three quarters of an acre as an addition to the Burying Place. Its location was recorded as, “beginning at the Stone standing at the northeast corner of the Burying Place that I sold to said Town of Stoneham and from then extending westerly Eight Rod to a Stone now standing near the South Side of the Path that leads from Stoneham Meeting House to Stoneham Parsonage House across my farm, from thence extending Southerly twenty Rod to another stone standing in my Land Southwesterly from the Southwest Corner of said Burying Place, from thence extending Eight Rods Easterly to another stone Standing Southerly of the Southeast Corner of said Burying Place, from thence extending Northerly twenty Rods to the first mentioned bound, with Strait Lines on every Side of said piece of land including within said bounds the one Quarter of an acre I sold to the Town of Stoneham for a Burying Place and with said Quarter of an acre said bounds include one acre of Land and the above said three Quarters of a[n] Acre of Land that I hereby give to the Town of Stoneham is for an addition to their said Burying Place with the Proviso that whenever the Town of Stoneham are inclined to and will have the above said piece of Land fenced The town of Stoneham shall make and maintain all the fence round said Piece of Land forever all upon the Town of Stoneham's Cost and Charge and said piece of Land is bounded all round on my other Land.

⁸ Pleasant Street was likely laid out between 1791 and 1830. It was not shown on the 1791 Plan of the Town of Stoneham, but did appear on the 1830 Plan of the Town of Stoneham.

records listed votes in 1828, 1830 and 1833 to approve the enlarging of the burying ground, but no additions of land were recorded.

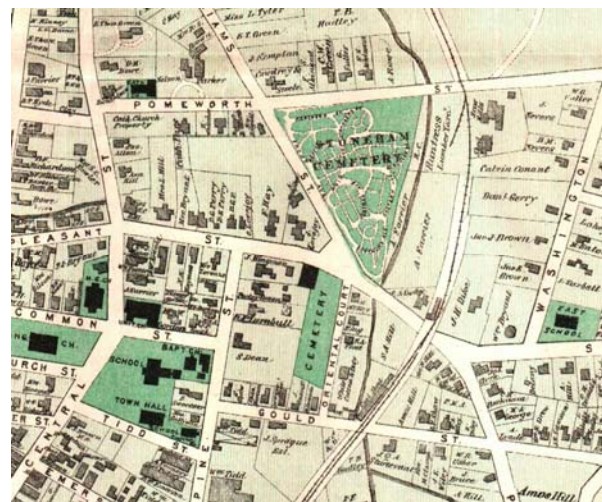
In 1833, the Town voted to fence the burying ground and to “grant the liberty to any persons or person to build a tomb, providing they do not disturb the dead...” Two years later, the Town voted to have “the wall in front of the grave yard rebuilt,” and in 1836, James Hill, Jr. had the first tomb constructed in the wall. The Town receiving tomb, located to the east of the Hill tomb, was approved for construction in 1845, and in 1855, Peter Green added a third tomb to the east of the Town tomb.⁹ The Town continued to repair and improve a fence around the property, as recorded in the 1853 Town Report.

The Old Burying Ground added the majority of its interments during this 100 year period. Some of the burials were contained in family plots ~ several graves of members of the same family, surrounded by a fence or other enclosure. By the mid 1800s however, burials slowed, and residents of Stoneham sought out plots in the new Stoneham Cemetery (also known as the William Street Cemetery), located across William Street to the north.¹⁰ The Town dedicated the new cemetery on May 15, 1844. Fifteen years later, Stoneham opted to create a third public cemetery – Lindenwood, located in the western part of the Town. After the opening of the Stoneham Cemetery and Lindenwood, fewer than 40 interments took place at the Old Burying Ground.

Enhancement – 1860 - 1930

During the latter part of the 19th century and early part of the 20th, the Old Burying Ground retained its size, but the Town made several physical modifications that enhanced its overall appearance. In 1862, the Town voted to form a committee of five to take charge of Lindenwood Cemetery. In 1896, the Stoneham Town Report recorded an acknowledgement that this committee had, in 1862, assumed care of the Old Burying Ground and William Street Cemetery. The “Trustees of Lindenwood Cemetery” (referred to hereafter as the “Trustees”) oversaw many of the changes to the Burying Ground made during this period.

Major modifications to the look of the Old Burying Ground included changes to its perimeter, on both the east and north sides,



The 1875 Beers' *Atlas of Middlesex County, Massachusetts* depicted the Old Burying Ground with a blackened box appended to its northwest corner, suggesting some type of civic or religious structure. The 1868 deed description of property purchased by Perley Green referred to this area as a “tomb lot,” however, no other evidence of such a structure is known to exist.

⁹ It is possible that another tomb or “tomb lot” existed in the northwest corner of the Burying Ground. In 1868, Perley Green purchased land on Pine Street, and the property description referred to a “tomb lot,” located between John Kingman’s land (intersection of Pine and Pleasant Streets) and the burying ground. It is possible that this land was, at one time, reserved for a tomb but never used for such purposes, as no other mention of such a structure has been found.

¹⁰ The Stoneham Cemetery operated from 1844 until 1900, when the land was taken by the Town for other public uses. The graves were gradually moved elsewhere.

with the east side consuming considerable effort. In circa 1861, Oriental Court was laid out, creating a new edge to the Old Burying Ground's east side. Shortly after this, several houses were built along the east side of Oriental Court. To create the new street, the Town appeared to have built some type of wall – possibly a retaining wall – to support the Burying Ground's eastern edge.¹¹ In 1878, the Town Report noted that a committee had been established to repair the wall, and to do the job properly, it would be necessary to move some graves.¹² In 1888, the Town introduced a sewer line along Oriental Court, undermining the wall, and requiring patching, and in 1896, the wall was rebuilt. Town reports indicated that the east wall was rebuilt a second time in 1914, an effort that included placing the wall on a cement foundation, and pointing it.¹³



In 1917, following the reconstruction of the Pleasant Street wall, the Hon. Levi S. Gould presented the Town with a bronze plate honoring the early settlers of Stoneham, and the men who fought in King Philip's War.

Also in 1914, deliberations began over the rebuilding of the Pleasant Street wall (north side), with the Town warrant including articles concerning the subject in 1914 and 1916. In 1917, the Town Report noted, “during the year the wall surrounding the Old Burying Ground has been completed in a most satisfactory manner and is a great improvement.”¹⁴ As part of this reconstruction, Honorable Levi S. Gould presented the Town with bronze plate, commemorating the early settlers of Stoneham and honoring those men who fought in King Philip's War. The plate was embedded near the west end of the front wall.

To the interior of the Old Burying Ground, the Town made a few

alterations. In 1880, pitch pine trees were growing inside, and the Town removed them, replanting the landscape with 150 young trees, mostly maples, and planting an *Arbor vitae* hedge. By the 1890s, the Town Reports noted that people were leaving rubbish in the Old Burying Ground, and that children were using it as a playground. As early as 1917, the cemetery trustees began urging the town to fence the Old Burying Ground, suggesting that the citizens of Stoneham use “all methods possible to prevent the Old Burying Ground from being used as a playground and loafing place...Each season that this is permitted results in fresh desecrations and depredations in this sacred spot, and it is to be hoped that

¹¹ Historical research did not reveal a precise date for the construction of this original wall, however Town records showed that some type of wall did exist prior to 1888, when the sewer was extended along Oriental Court, at which time an existing wall was undermined.

¹² Annual Town Report, 1878, p. 27.

¹³ Efforts to have the wall re-built a second time began as early as 1900, when Trustees of Lindenwood Cemetery, charged with care of the Old Burying Ground, noted, [w]hen the sewer was put through Oriental Court, the wall was undermined and has settled and is thrown out of shape...We would recommend that the wall be re-laid in cement so that the children cannot climb over it, and to have large stones laid eight feet apart, for the purpose of putting a fence on top of the wall...”

¹⁴ Annual Town Report, 1917, p. 127.

all citizens seeing such occurrences in the Old Burying Ground will report them to the proper authorities that all vandalism may be prevented and those perpetrating it may be properly dealt with.”¹⁵

As previously noted, burials in the Old Burying Ground after 1860 slowed considerably at the end of the 19th century, and only one interment took place in the 1900s. In 1924, Sarah Lynde was buried near the far southern end, representing the final interment at the Old Burying Ground.

Modernization & Decline – 1930 – Present

Beginning in the 1930s, the Town made several modern additions to the Old Burying Ground that gave the property a more contemporary appearance. After years of requests, the Trustees successfully secured funds for a new chain link fence to be constructed around the perimeter. In 1937, citizens voted at Town Meeting to erect the fence and the Independent newspaper reported that the new “wire” fence had been constructed in June. The five feet high structure was secured to the top of the Oriental Court and Pleasant Street retaining walls with posts set in concrete and the wire and posts painted green. It remains intact to this day, having been repainted at least once in the 1950s.

Also in the 1930s, the Town undertook an effort to place copper caps on many of the older slate headstones. The 1938 Town Report stated, “[a] number of the older headstones in the Pleasant Street Cemetery that were split by age and weather, have been encased in metal sheaths which will preserve them for a long time.”¹⁶ Work continued on the stone-capping project until 1950, with seventy-five stones involved. In the 1940s, the Works Progress Administration’s Veterans’ Graves Registration Project came to Stoneham, and mapped 44 veterans graves in the Old Burying Ground. In 1942, the Town removed 500-600 feet of iron pipe from the Old Burying Ground as a donation to the war effort.



Beginning in 1938, the Town began capping the slate tablets with copper caps with the intention of preserving the stone’s longevity. The effort continued until 1950.

In 1957, a newly-created Board of Public Works assumed care and management of Stoneham’s cemeteries, including the Old Burying Ground. Yearly reporting on its condition in the Town Report subsided, and as the century wore on, the property became increasingly neglected. Gravestones continued to deteriorate, with several beginning to lean, and many breaking altogether. As budgets for public works projects diminished, Town crews limited care at the Old Burying Ground to mowing and leaf removal.

In 1984 the Old Burying Ground achieved status on the National Register of Historic Places, drawing renewed attention to the historical importance of one of Stoneham’s oldest public landscapes. However, care continued to include only routine maintenance. Concern about the property’s future

¹⁵ Annual Town Report, 1917, pp. 127-128.

¹⁶ Annual Town Report, 1938.

health increased, and in 2011 the Stoneham Historical Commission applied for funds from the Massachusetts Historical Commission to prepare a long term preservation plan. The result was a Massachusetts Preservation Projects Fund grant that has provided matching support for the foregoing *Stoneham Old Burying Ground Preservation Master Plan*.

Period of Historical Significance

The period of significance for Stoneham's Old Burying Ground landscape spans the years 1726 to 1930. During this 204-year period, Stoneham established the site and placed over 300 burials. The Burying Ground's most prominent physical features, including the Town receiving tomb, Hill tomb, Green tomb, east and north retaining walls, family plot details, and nearly 500 head and footstones date to this period, contributing to its character as a Colonial style New England cemetery. Future efforts to preserve the Old Burying Ground should adhere, as closely as possible, to this period of historical significance.

LANDSCAPE ASSESSMENT

The following is an assessment of the landscape conditions at the Stoneham Old Burying Ground. Its purpose is to document the existing natural, built, functional and character-defining features; to analyze their condition; and to outline preliminary recommendations for preservation treatment. Together with the information compiled about the historical development of the burial ground, the assessment provides a foundation for the *Preservation Master Plan*.

Location & Setting

The Old Burying Ground lies on 1.09 acres near the geographic center of Stoneham, at the southwest corner of the Pleasant Street and Oriental Court intersection, and at the southern terminus of William Street. Residential properties on small parcels of land surround the site on all sides. To the north, across Pleasant Street, are late 19th century 2 ½ story homes spaced very closely together, with narrow front setbacks. The 1 ½- to 2-story homes across Oriental Court, most of which were built in the mid 1800s as shoe factory worker housing, also sit on small lots close to the street edge. The rear yards of homes along Pine Street (west of the burying ground) and Gould Street (south of the burying ground) abut the west and south sides. Yards on the west side contain shade trees and lawns, while the yard on the south side has been paved with asphalt to accommodate an auto body repair shop.

Edges & Views

The Town of Stoneham has maintained a 5' high chain link fence around the entire burying ground perimeter since the mid 1900s, and while made of a modern material, the fence serves to visually separate the property from its neighbors. The quality of the four edges varies, as follows:

- The north and east edges are the burying ground's strongest, and support the property's historic character. A mortared cut stone wall, ranging in height from approximately 5' to 18" lines the edges along Oriental Court and Pleasant Streets. Three tombs, constructed into the wall along Pleasant Street, further embellish the wall. The 5' high chain link fence rests on top of the wall, and along Pleasant Street, exposed stones project upward from the top of the wall. Vegetation has been kept away from the fence, allowing for open views into the burying ground, except at the southeast corner, where a dense Oriental Bittersweet vine covers the chain link.
- The west and south edges conflict with the historic



The retaining wall and fence along the property's east side provides visual separation between the burying ground and adjacent Oriental Court.

character of the burying ground. The chain link fencing continues along both edges, and in several spots volunteer trees and remnant stumps stand within the fence line, leaving a messy appearance. Because visitors can see through the chain link fence in many spots, back yard activities, including private functions and the operations of the auto body repair shop, extend visually into the burying ground. An exception lies near the northern end of the west edge, where the abutting neighbor maintains an *Arbor vitae* hedge.

Views of the burying ground from the outside looking in, as well as from the interior looking outward, correspond to the quality of the edges. In spots along the north and east edges, where the retaining wall is over 4' in height, long views into the property are difficult, except for very tall people. Views into the burying ground from the south and west edges are only possible if visitors trespass on the privately owned adjacent properties. From inside the burying ground however, many pleasing long views across the site are possible, where visitors can glimpse the old gravestones under the shade of tall trees. From the center of the burying ground looking outward visitors can see the adjacent houses and back yards through the chain link fencing.

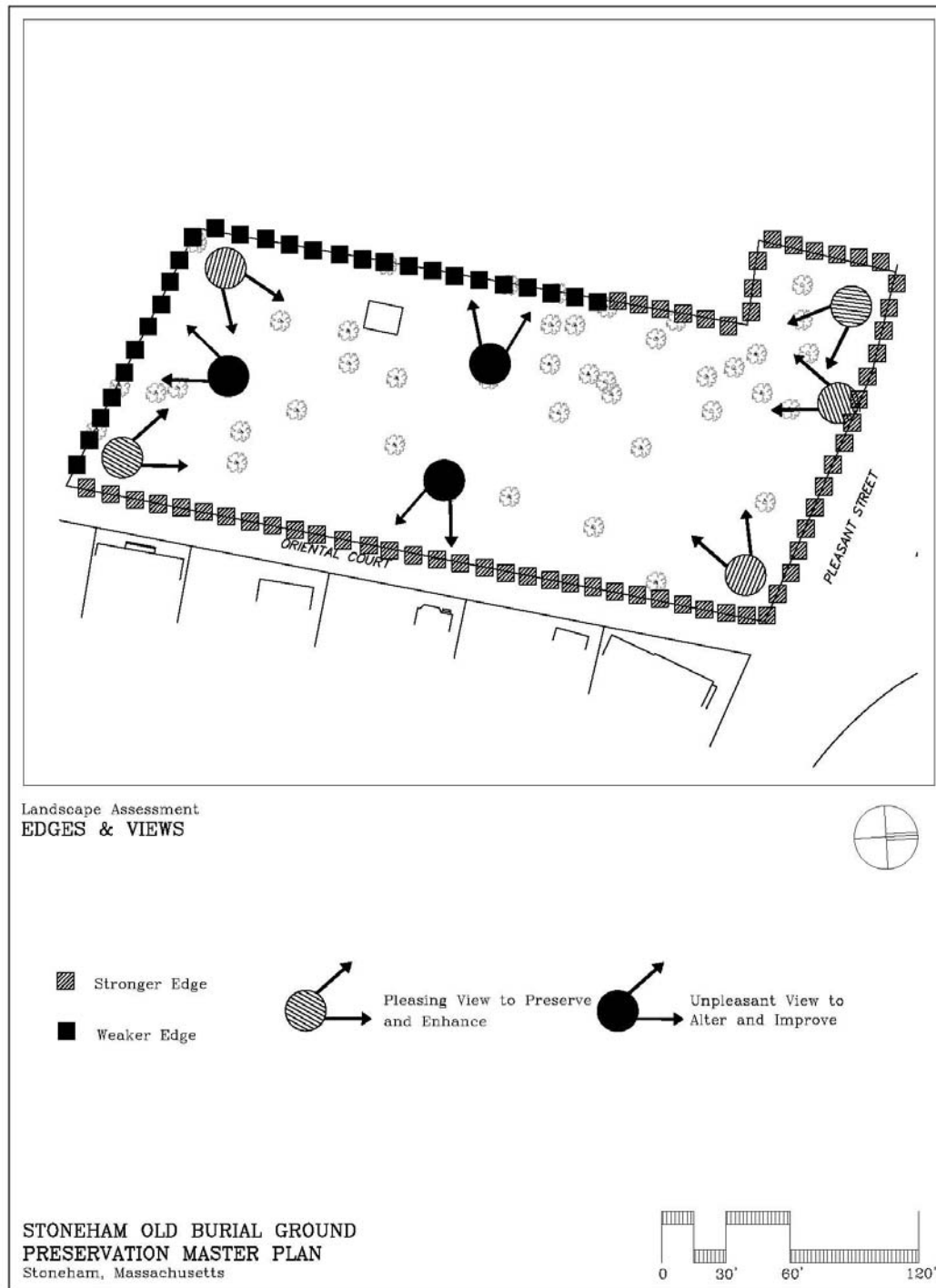


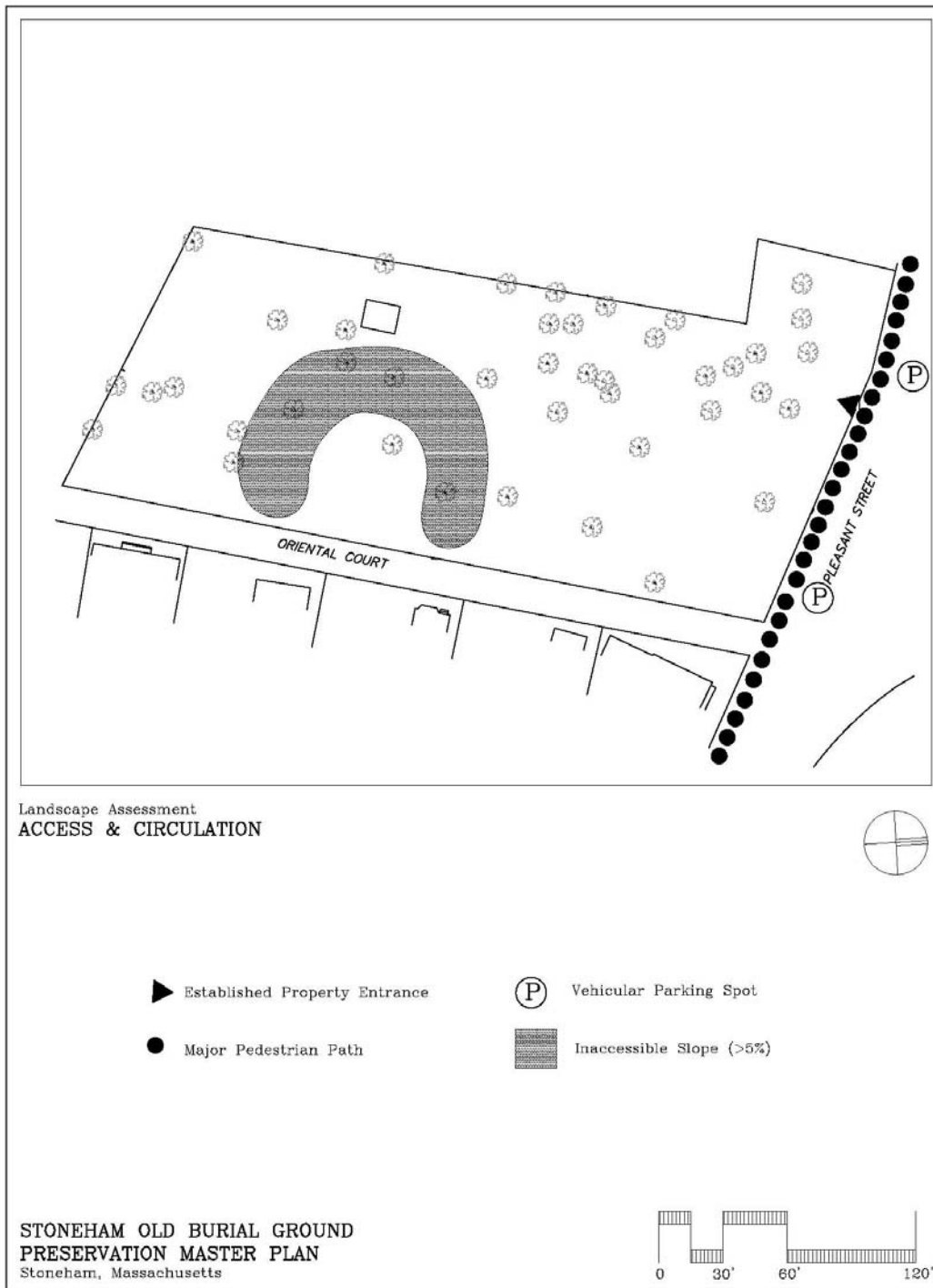
A single-leaf steel picket-style gate, located at a break in the Pleasant Street retaining wall, provides the only access into the burying ground.

Access & Circulation

Visitors to the Old Burying Ground arriving by vehicle may park along either side of Pleasant Street, however no designated (painted) spaces exist on the street. As a result, motorists park haphazardly, partially on the existing bituminous sidewalk and “Cape Cod Berm” (mountable bituminous curb) in front of and adjacent to the burying ground wall. This parking arrangement not only obstructs the sidewalk; it also poses a threat to the long term stability of the three tombs built into the burying ground wall.

Entrance into the burying ground is through a single leafed gate, located at a break in the Pleasant Street wall near the northwest corner of the property. Visitors must obtain a key (the gate is permanently locked), and ascend up one concrete step to reach the burying ground’s interior. Once inside the gate, visitors must travel across turf and groundcover, as the burying ground contains no established pathways. Topography across most of the property is gentle enough (<5%) to accommodate persons of all levels of physical ability, however a small, bowl-shaped area near the center of the property contains some steeper, more difficult-to-navigate slopes (>5%).





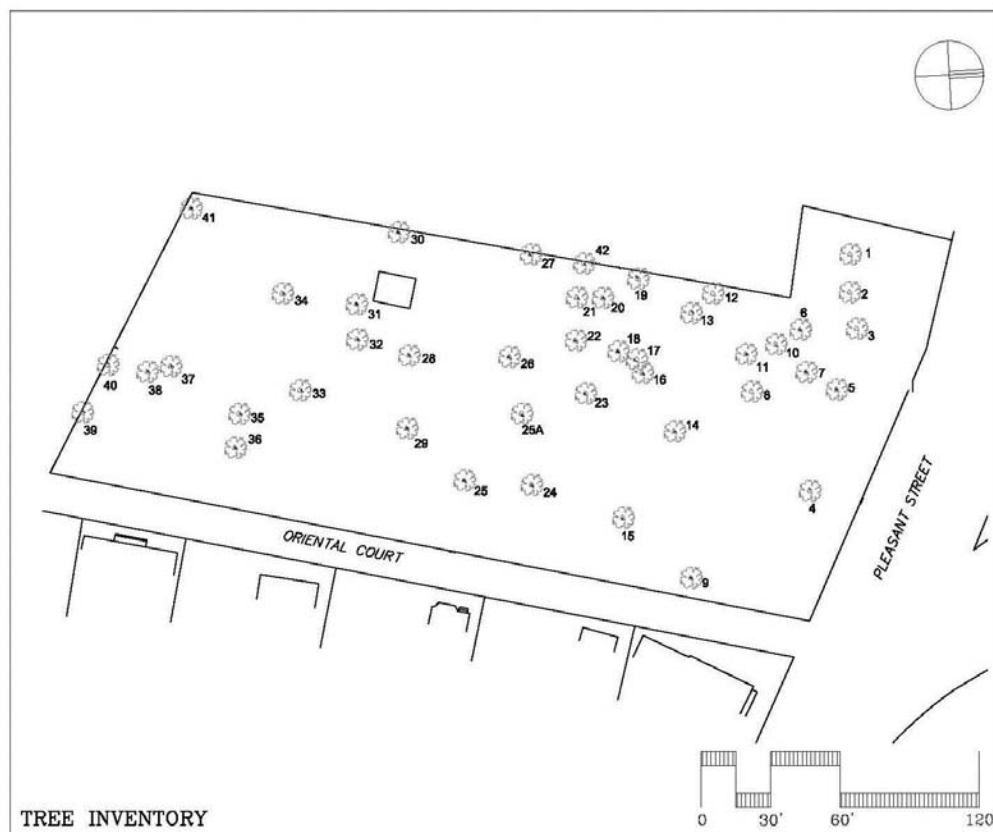
Plant Communities

The Old Burying Ground contains a total of 43 trees, including maple (*Acer*), horse chestnut (*Aesculus*), hickory (*Carya*), ash (*Fraxinus*), larch (*Larix*), pine (*Pinus*), and oak (*Quercus*). Of these, nearly 65% are maples, and another 21% are oaks, making these the dominant species. The other tree species stand singly. Tree diversity is essential to maintaining a healthy landscape, with the goal to have no more 10% of a single genus, and 5% of a single species. The Old Burying Ground's collection of trees falls far short of this goal. Many of the trees contain dead or broken limbs (approximately one-third), which suggest a lack of regular maintenance, while others (also approximately one-third) show signs of decay and decline. The 43 trees are shown on the tree inventory diagram, and listed on the accompanying spreadsheet (seen below and on the next page).

An array of perennial ground covers blankets the floor of the burying ground. These not only provide color and texture to the property; they also reduce the need for the regular mowing required by most lawns. Species of ground covers include Sedum, Aguja, lichen and moss. A colony of the invasive herbaceous perennial



The burying ground contains several mature “senior” oaks, measuring 48” in caliper and extending 50’ to 60’ in height.

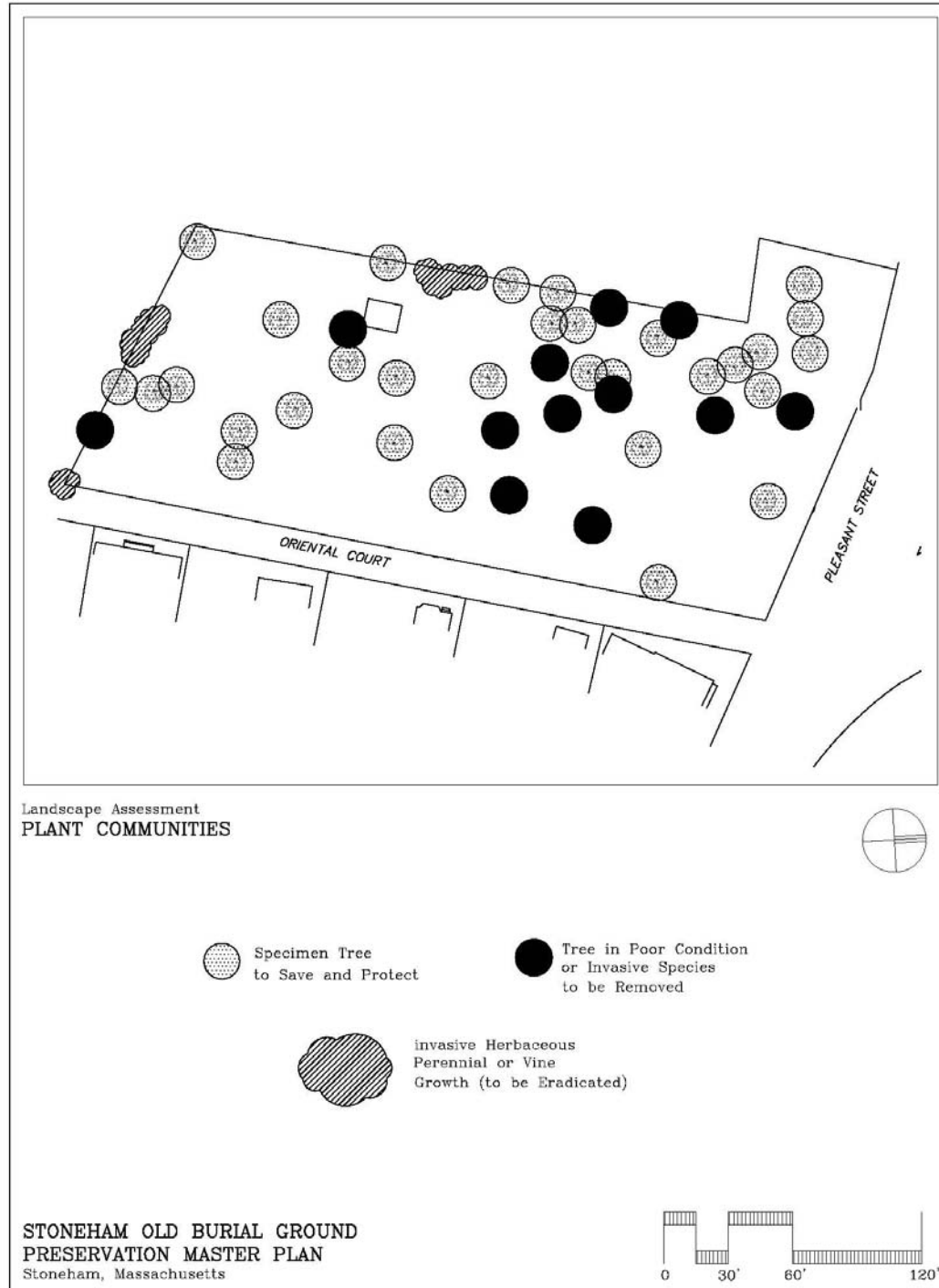


Stoneham Old Burying Ground
Inventory of 43 Existing Trees
May 2012

Number	Genus	Size (Caliper)	Condition	Notes
1	Quercus	48"	1	
2	Acer	24"	1	
3	Acer	24"	1	
4	Quercus	48"	2	
5	Acer	18"	4	Remove
6	Acer	18"	2	
7	Acer	18"	2	
8	Acer	12"	3 to 4	Remove
9	Quercus	12"	1	2-Litered
10	Acer	24"	2	
11	Acer	18"	2 to 3	
12	Acer	18"	3 to 4	Remove
13	Acer	30"	2	
14	Acer	24"	2	Deep Crotch
15	Acer	24"	3	Remove
16	Acer	24"	3 to 4	Remove
17	Quercus	30"	2	
18	Quercus	30"	2	
19	Fraxinus	30"	3 to 4	Remove
20	Aesculus	30"	2	
21	Acer	24"	2	
22	Acer	18"	4	Remove
23	Acer	24"	3 to 4	Remove
24	Acer	24"	3 to 4	Remove
25	Acer	36"	2	
25A	Acer	18"	4	Remove
26	Quercus	24"	1 to 2	
27	Catalpa	8"	2	
28	Larix	24"	1	
29	Quercus	24"	2	
30	Quercus	12"	1	
31	Acer	24"	3	Remove
32	Acer	24"	2	
33	Acer	24"	2 to 3	
34	Acer	30"	2 to 3	
35	Acer	24"	2 to 3	
36	Acer	24"	2 to 3	
37	Quercus	24"	2	
38	Quercus	48"	2	
39	Acer	12"	3 to 4	Remove
40	Acer	24"	3	
41	Acer	48"	2 to 3	
42	Pinus	4"	1	Immature

Key to Condition:

- 1 = Stable
- 2 = Stable with Dead Branches
- 3 = Signs of Decay
- 4 = Dying or Dead



Tree Assessment Summary

31 - For Protection

12 - For Removal

known as Garlic Mustard (*Alliaria petiolata*) has emerged along the south property line and is infiltrating the burying ground.



The pipe rail fencing surrounding the Hay family plot is intact, however the paint has begun to wear off, and the metal has started to corrode.

Structures

The Old Burying Ground contains several historic structures that play a large role in the appearance of its landscape. A summary of their condition is as follows:

- **Oriental Court Retaining Wall** – This mortared cut stone wall spans the entire length of Oriental Court and stands approximately three to four feet high. A chain link fence was erected on top of the wall (likely after the wall was constructed) and placed in square-shaped granite bases, set into the top of the wall. The joints contain two layers of mortar, lime-based and cement, with the lime-based mortar likely the original material. Corrosion of the chain link fencing has resulted in staining on a portion of the wall. Overall, the wall stands plumb, with little sign of movement.
- **Pleasant Street Retaining Wall** – This wall is similar to the Oriental Court wall in materials (stone and two types of mortar) and construction, and ranges in height from 18” (west end) to 5’ (near the tombs). The chain link fencing was also constructed atop the wall, and a 48” wide break in the wall and fence contains a steel picket gate. Jagged stones protrude from the top of the wall in front of the chain link fence. Corrosion of the fence and gate has caused staining on the wall, however the structure is plumb with a sign of only minor movement near its intersection with the Oriental Court wall where a crack has formed.
- **Peter J. Green Tomb** – This granite-façade structure stands at the eastern end of the cluster of three tombs set into the Pleasant Street retaining wall. The structural assessment revealed that the façade is leaning slightly toward the street, however the interior side and rear walls and roof are stable. The exterior is stained, and its steel door, containing a figure and inscription in bas relief, has been painted with graffiti. Overall the tomb is in good condition.
- **Town Receiving Tomb** - This granite-façade structure matches the Green tomb in design, materials and construction on the exterior, with only minor leaning of the façade walls forward toward the street. The interior side and rear walls and roof are stable. As with the Green tomb, the exterior is stained, and its steel four-panel door shows corrosion. Overall the tomb is in good condition.
- **James Hill Tomb** – The exterior of this granite-façade structure has squatter proportions compared the two other tombs, and its façade is leaning significantly (1” to 3”) toward the

street. On the interior, the tomb displays unusual detailing, including a 8" x 8" clay tile floor punctuated by a 24" deep pit in the center. Its door is made of tongue-and-groove style vertical wood panels, and the entire structure is stained. The overall condition of the tomb is poor.

- *Stevens, Gould & Hay Plot Enclosures* - The Stevens, Gould and Hay family plots were originally enclosed by fences, with only the Hay plot fencing remaining on site. The posts for all enclosures were installed on granite blocks, set partially below grade. Over time, the blocks have shifted and soil around them has eroded, leaving an uneven level of stone exposed. The Hay plot fencing is made of steel pipe, and shows signs deterioration from corrosion. A small remaining portion of the Stevens plot fencing (located off-site) suggests that the original material was cast iron, with an elaborately molded gate.
- *Gerry Plot Corner Posts* - The corners of the Elbridge Gerry family plot are marked with stone posts, with the southwest post nearly buried.

For more detail about the condition of perimeter walls, Hill and Green tombs, and receiving tomb, refer to *Appendix B: Engineering Assessment*.

Gravestones

The Old Burying Ground contains a total of 490 grave markers, which includes 146 footstones, ranging in date from 1728 to 1924. Materials used for these stones include slate (402 stones), marble (86 stones), sandstone (1 stone) and granite (1 stone), with the majority (82%) made of slate. The assessment of the grave markers revealed that a majority are in stable condition, however a total of 102, including 65 headstones and 37 footstones, are in need of conservation treatment. The condition of these damaged stones is as follows:

- *Hazardous* (7 stones) - these stones are unstable, meaning that they are in immediate danger of falling and/or suffering from further deterioration.
- *Suffering from Unstable Deterioration* (32 stones) - these stones have been fractured, are significantly tilted, and will require repair and/or resetting.
- *Suffering from Ongoing Deterioration* (63 stones) - these stones are less significantly tilted and will require resetting.



Seventy-five of the slate markers were capped with copper in the 1930s and 1940s. The gravestone assessment recommends removing most caps and treating the slate.

The remaining 388 stones are in stable condition and require no treatment at this time, however they should be re-inspected in five to ten years. Beginning in the 1930s, an effort to stabilize the slate

markers led to the capping of 75 slate stones with strips of copper attached with metal bolts. This activity took place outside the Old Burying Ground's period of significance and the caps obscure many of the stones' artfully-carved tympanum areas. Therefore, the assessment recommends that a representative sampling (five to seven) capped stones retain the copper, with all others having the caps removed and the slate restored. For more detail about the condition of the Old Burying Ground's gravestones, refer to *Appendix C: Gravestone Assessment*.

In addition to the 490 identifiable stones, the burying ground contains fragments of gravestones scattered and/or piled several locations. Because no historic map showing the location of burials is known to exist, the proper location for the fragments is difficult to ascertain. Most are located within the southern half of the burying ground, with a pile of nine fragments clustered around the Woodbury and Elizabeth Messer stones. The Town of Stoneham currently has no established procedure for handling the fragments, so that future loss is prevented.



The bronze memorial plaque, placed by Levi Gould, is one of the burying ground's enduring character-defining features.

Character-Defining Features

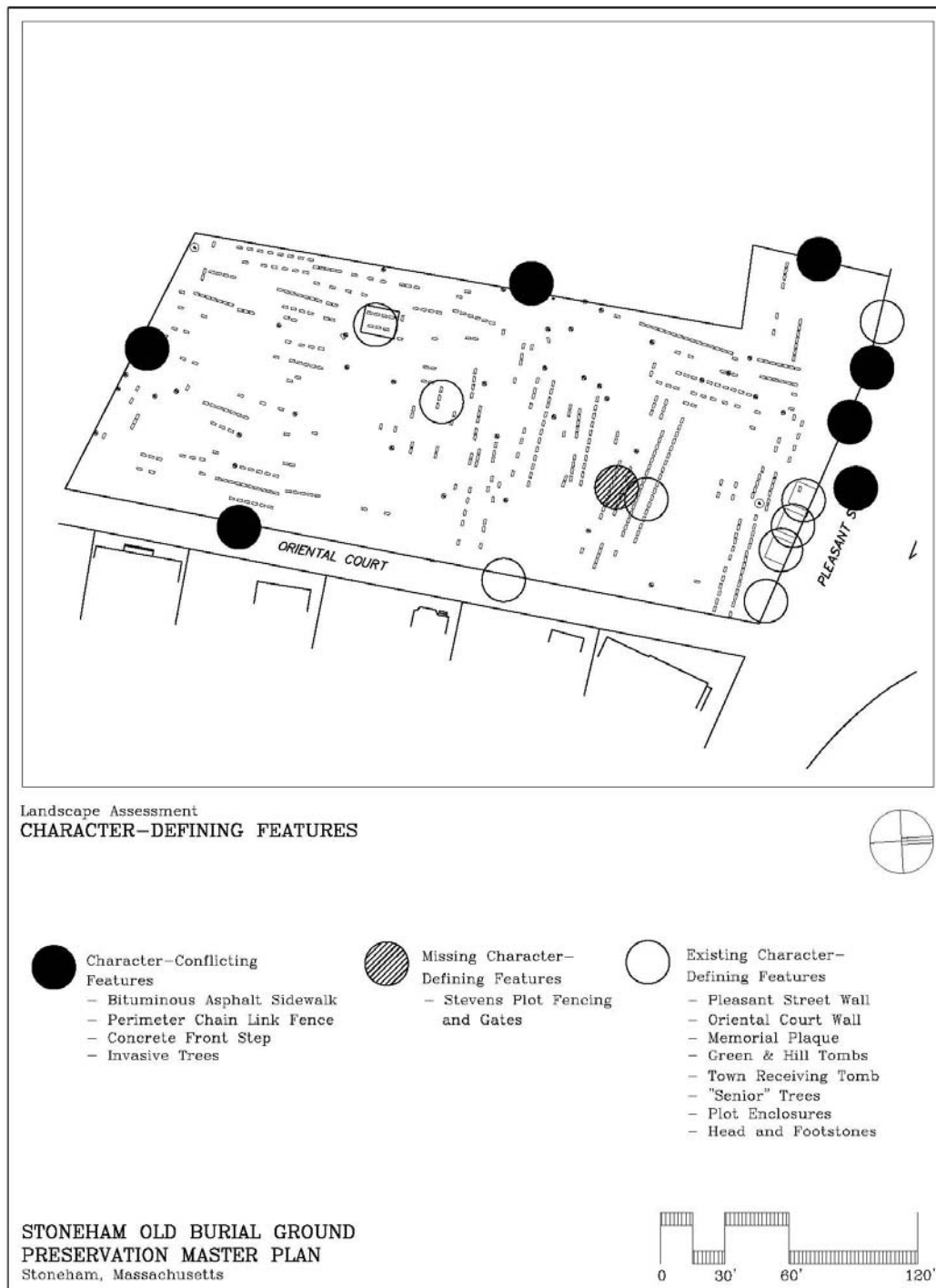
The Old Burying Ground contains several details in its landscape that complement its historic character. They include:

- The perimeter walls lining Oriental Court and Pleasant Street, and the Gould and Gerry memorial bronze plaque (placed by Levi Gould);
- The two Green and Hill (private) tombs and Town receiving tomb;
- The gently rolling topography (likely original, ungraded landform);
- Three “senior” oaks (#s 1, 4, 38) and one sugar maple (#41) tree, each reaching 48” in caliper;
- Details surrounding the Stevens, Gould, Hay, and Gerry family plots; and
- Historic gravestones.

In addition, the fencing and gates surrounding the Stevens plot are historic features that are now missing.

The following represent contemporary additions to the Old Burying Ground, and fall outside the period of significance:

- Bituminous asphalt on the sidewalk abutting the tombs (Pleasant Street south side);
- Perimeter chain link fencing;
- Concrete step leading through the burying ground entrance;
- Volunteer and invasive species of trees (especially Norway maple).



Preliminary Recommendations

Future preservation efforts at the Stoneham Old Burying Ground will involve each of the four treatment methods outlined by the United States Secretary of the Interior's *Guidelines for the Treatment of Cultural Landscapes* (1996). They include:

- *Preservation*, where existing form, integrity and materials of the landscape will be sustained;
- *Rehabilitation*, where features in the landscape will be repaired or altered to make their use compatible with the landscape's historical value;
- *Restoration*, where landscape features will be returned to their original form; and
- *Reconstruction*, where landscape features no longer extant will be recreated.

Based on the preceding assessment, the following preliminary recommendations should be considered for the *Preservation Master Plan*:

- Clean and re-point (where required) the Oriental Court and Pleasant Street walls, and consider replacing the existing chain link fence with a more historically sensitive and compatible fence. Repair or replace the steel gate with a style complementary to the fence, and replace the concrete step leading into the burying ground with a more historically compatible material, such as granite.
- Clean the tomb facades, and restore the doors, as required.
- Work with the Town of Stoneham to upgrade the condition of the curbing and sidewalk along the Pleasant Street edge. Include in this effort the use of a more historically sensitive paving material (such as brick pavers, concrete, or a combination thereof) and the introduction of interpretive sign(s).
- Remove the trees from the burying ground interior that show signs of decay or demise, and remove the one invasive tree species (Norway Maple). Commission a Massachusetts-certified arborist to complete a detailed assessment of the remaining trees, and institute a tree management program that provides care on an ongoing basis.
- Remove the large stumps standing along the southern property edge by cutting to a maximum 6" above ground.
- Remove, by mechanical or chemical means, the garlic mustard infiltrating the burying ground's south and west edges, and the dense bittersweet vine growing on the chain link fence (southeast corner).



The Rev. John H. Stevens family plot gate, measuring 46" high and 28 1/2" wide, has been removed, along with the fencing, from the burying ground. In the future, this unusual feature should be restored and returned to the site.

- Introduce new tree plantings at the perimeter of the burying ground, especially on the west and south sides, to provide a greater sense of privacy and separation from the adjacent property owners. Select a diversity of species with the goal of eliminating the existing monoculture of maples.
- Treat the 102 gravestones identified in the Gravestone Assessment as needing conservation, beginning with the highest (#1) priority stones.
- Establish a procedure for handling stone fragments, including documentation and long-term storage.
- Stabilize the bases of the fence posts surrounding the Stevens, Gould, Hay and Gerry plots, and restore the Hay plot fencing. Consider reconstructing the Stevens fencing in the long term.
- As a means of providing universal access to the burying ground, place an interpretive sign outside the burying ground entrance, and include information about the burying ground's history, the persons interred within, and the importance of the landscape to the development of Stoneham as a town. The sign should be placed in lieu of a reconstructed entrance. The Pleasant Street retaining wall's height and close proximity to the street severely compromise the Town's ability to create an ADA-compliant entrance to the burying ground. To create an accessible entrance, the wall and tombs would need to be removed and bodies disinterred, to build a ramp system. Even if this effort was made, the uneven terrain within the burying ground makes navigation for persons with physical disabilities very challenging.

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RECOMMENDATIONS

Preservation Priorities

The following list organizes the preliminary recommendations of the *Landscape Assessment* section of the plan into a series of eleven projects, and places them in priority order. The highest priority projects include urgently-needed treatments, while the lower priority projects include aesthetic enhancements. Medium priority projects fall somewhere in between.

Project 1: Fragment Procedure

Project 1 involves documenting the existing gravestone fragments – ones without a parent stone – and burying them in a designated location within the burying ground. As noted in the *Landscape Assessment*, these loose, unidentified pieces lie vulnerable to theft and vandalism, and their sharp, irregular edges can pose a danger to burying ground visitors. An individual documentation sheet will be created for each fragment, and documentation will include:

- A description of the fragment's location within the burying ground (where it was were found);
- A photograph of the fragment;
- A sketch and description of the fragment, including material and measurements.

In addition, each fragment will be numbered and tagged (with a removal material), and each corresponding documentation sheet numbered to match. After documentation is complete, the fragments will be buried in one or two locations near where they were found, and the location(s) documented. Recommendations for burying the fragments are as follows:

- Excavate a hole ten to fifteen inches deep (depending on the thickness of the stone – the stone should lie flat);
- Place two inches of clean, graded sand in the hole for drainage and to accommodate any irregularities in the surface of the stone;
- Place the stone flat and face up in the sand;
- Cover the stone with one to two inches of clean sand;
- Add six inches of topsoil and ground cover.

Note: This project may be completed by volunteers.

Project 2: Invasive Plant Removal

Project 2 involves removing invasive plant growth from the burying ground landscape, including *Celastrus orbiculatus* (Oriental Bittersweet) and *Alliaria petiolata* (Garlic Mustard). *Celastrus* must be cut back to a stump, and the stump must be treated with an herbicide (Glyphosate) or excavated (preferred method). *Alliaria* must be removed with its roots. The herbaceous parts of each plant (stems, leaves and flowers) must be bagged and disposed of offsite. Both plant species appear in the *Management* section of this plan, along with specific methods of control for each. *Note: This project may be completed by volunteers.*

Project 3: Priority 1 Gravestones & Removal of One Tree

Project 3 includes conservation treatment of seven markers identified in the *Gravestone Assessment* as “hazardous” in condition (priority 1). These markers are fractured, severely tilted, and/or extremely unstable. An example is the Sarah Hay marker (#2), located at the far northeastern corner of the burying ground. This slate stone, dating to 1839, has been broken into three pieces, two of which lie flush with the ground. Treatment of the stone will include attaching the fragments, and resetting the stone in an upright position. Before treatment begins, the Town should remove tree #24, which lies in close proximity to two priority 1 stones.

Project 4: Priority 2 Gravestones & Removal of Seven Trees

Project 4 includes conservation treatment of 32 markers identified in the *Gravestone Assessment* as and in an “unstable state of deterioration” (priority 2). These markers have fallen, are fractured, and/or require resetting. The marble Thomas Vinton marker (#52) located near the northwest corner is one such stone in this category. The stone was previously repaired, and the top ¼ has been broken off and is leaning against the parent stone. Treatment will include cleaning the surfaces and re-attaching the broken pieces, using a structural adhesive. Before treatment begins, the Town should remove seven trees: #s 12, 15, 19, 22, 24, 25A and 31, as they lie near or adjacent to several of the priority 2 stones.

Project 5: Remaining Tree and Stump Removal & New Tree Planting

Project 5 includes the removal of four remaining trees, designated by the Town’s consulting arborist as in decline or dying, or invasive (Norway maple). The project also involves cutting (maximum 6” high) two tall stumps from the burying ground’s south property line. Once these trees and stumps are removed, new trees will be planted to the perimeter of the burying ground, with emphasis on the south and west sides. New trees should be selected so that the property achieves, over the long term, a diversity of species, and under no circumstances should invasive species be reintroduced. A list of recommended trees appropriate to the burying ground’s period of significance is included in the *Management* section of this plan.

Project 6: Priority 3 Gravestones

Project 6 includes conservation treatment of 63 markers identified in the *Gravestone Assessment* as exhibiting “ongoing deterioration,” (priority 3). Each of these stones, including 34 headstones and 29 footstones, is tilted and will require resetting, and/or has been moved or rotated and will require relocating. The slate footstone of Rebekah Green (#337.1), inscribed with “R. G.,” is one such rotated stone, which will be reset in the opposite direction.

Project 7: Copper Capped Stones

Project 7 involves treatment of 64¹ markers that have been capped with copper, not already treated under the priority 2 (one stone) or priority 3 (ten stones) categories. Each of the 64 copper capped stones will have the metal removed, and the holes and delaminated areas filled.

Project 8: Oriental Court & Pleasant Street Walls and Tombs

Project 8 includes the cleaning and repointing of the Oriental Court and Pleasant Street walls; replacement of the existing chain link fence; repair of the gate; and stabilization of the tombs. As noted in the *Engineering Assessment*, the walls are in good condition, with 1” to 3” of façade movement, but

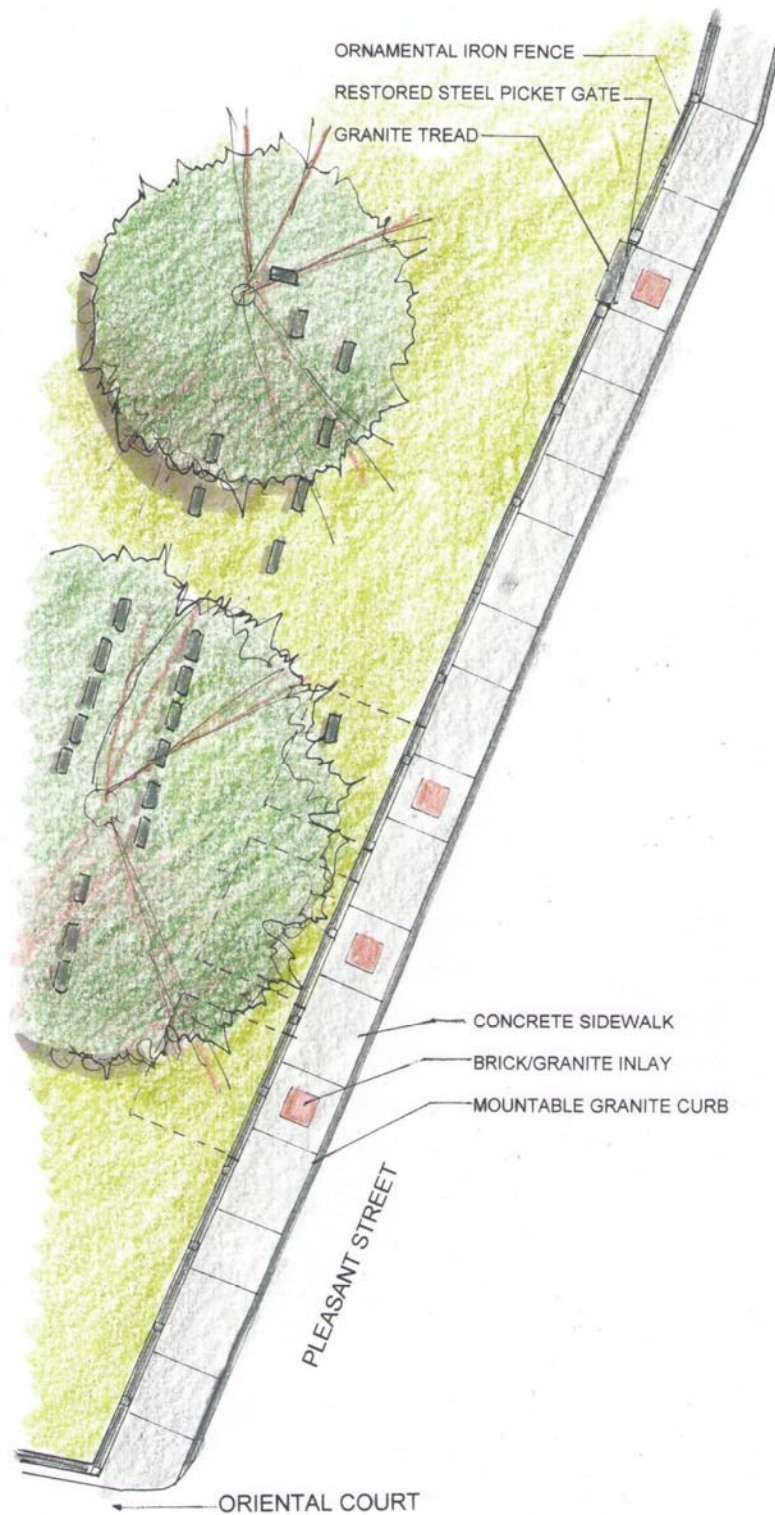
¹ Note that the *Gravestone Assessment* suggests that the Town retain five to seven copper capped stones as representative examples, although this is not essential.



Proposed planting along the burying ground's south and west property lines will help screen the back yards of adjacent privately-owned properties (Project 5). Drawing not to scale.

they have been stained and patched with contemporary mortar. Project 8 will involve cleaning the walls and repointing them with historic lime-based mortar, and restoring the Levi Gould plaque. In conjunction with this repointing effort, the following will take place:

- *Cleaning and Repointing of the Tombs.* This will include graffiti and street grime (from diesel exhaust) removal, repointing using an historic lime-based mortar. For more information about graffiti removal, refer to the *Management* section of this plan.
- *Restoring the Three Tomb Doors.* The metal Green tomb and receiving tomb doors will require repainting (removing existing graffiti, paint and rust) and the tongue-and-groove style Hill tomb door will require re-fabrication. The hardware on each of the doors may be re-used or replicated.
- *Erected New Fencing.* The existing chain link fencing, installed as early as the 1930s (and either repainted and/or replaced) will be removed and replaced with a picket-style steel fence (on the north and east sides) and black vinyl-coated chain link on the south and west sides. To install the new picket-style fence, the Town should utilize the existing sleeves and poles, and mount new posts on them.



Reconstruction of the Pleasant Street edge (Project 9) will involve repaving the sidewalk with concrete and installing granite or brick inlays in front of the tombs and burying ground entrance. Drawing not to scale.

- *Replacing the Concrete Step and Restoring the Gate.* The existing concrete step will be removed and replaced with a granite tread of the same dimensions, and the gate will be removed, straightened, re-painted and re-hung on the new fence.

Project 9: Pleasant Street Edge

Project 9 involves reconstructing the sidewalk along the length of the Pleasant Street wall so that it provides a more complementary setting for the burying ground. The existing “Cape Cod Berm” curb will be removed and replaced with a granite mountable curb. The existing bituminous asphalt walk will be replaced with concrete, and an inlay of granite or brick pavers will be placed in a pattern along the length of the walk to announce the tombs and entrance to the burying ground. Note that this project should be timed and coordinated with future efforts to re-pave Pleasant Street.



A detail of a stone wall with both contemporary mortar (closer to the surface) and historic lime-based mortar (deeper inside the wall) present. Project 8 involves cleaning both the Pleasant Street and Oriental Court walls, and repointing them with historic lime-based mortar.

Project 10: Interpretive Sign

Project 10 involves design, fabrication, and installation of an interpretive sign, to be located outside the burying ground near the Pleasant Street gate. Its purpose will be to bring interpretive information “outside” the burying ground wall, so that the landscape becomes accessible to users of all levels of physical ability. It also will provide instructions to visitor who would like to access the burying ground. The design should complement the burying ground’s period of significance in style and materials, and the sign panel(s) should contain information about the property’s importance in the historical development of Stoneham. The sign panel should be mounted on the restored Pleasant Street wall, so that it does not obstruct the path of snowplows.

Project 11: Family Plot Enclosures

Project 11 includes restoring the stone piers that once supported fencing around the Stevens, Gould and Hay plots; stabilizing one corner pier marking the Gerry plot; restoring the existing Hay plot fencing; reconstructing the Stevens plot fencing in a style compatible with the extant Stevens plot gate; and restoring and resetting the gate, as follows:

Gould Plot. The stone piers surrounding the Gould plot will be removed, cleaned, and re-set on compacted gravel bases, to ensure longer term stability. *Note: if the Town intends, at some point in the future, to set fencing on the piers, then the stones should be set on concrete bases, a minimum of 36” below grade.*

Hay Plot. The existing piers at the Hay plot will remain in place, and fill will be brought in to even out the reveal of each pier to an exposed height of six inches. The existing tubular metal fence will be stripped of rust and repainted in situ. *Note: an analysis of the existing paint should be conducted prior to commencing with restoration. If lead is found, then the fence should be removed and taken to a lead abatement facility for restoration.*

Stevens Plot. The existing piers surrounding the Stevens plot will be removed, cleaned, and re-set on concrete bases at a minimum depth of 36". A new steel fence, designed to complement the extant gate, will be fabricated and installed on the piers. Finally, the gate will be restored and re-hung on the new fence. Between now and the time the plot perimeter is restored, the Town should arrange to have the historic gate placed on display in a public – but secure ~ location.

Gerry Plot. The southwest corner pier of the Gerry plot will be removed and re-set on a 6" to 8" bed of compacted gravel, with a reveal height that matches the other plot piers. Any re-grading should be kept to a minimum, and the finished grade should be planted with perennial ground covers.

Preservation Costs

The following list assigns a preliminary cost to each of the preservation projects listed above. Note that the cost figures are merely projections, intended as guidelines for the Town of Stoneham in setting fundraising goals. All figures are based on 2012 construction industry and conservation trade rates, and most do not include fees for surveying, design, engineering, bidding, overhead, profit and bonding.

Project 1: Fragment Program – Volunteer Project

Costs of Project 1 include preparing a documentation sheet template, documenting (including photographs) each fragment, and burying each fragment. This project should be undertaken by volunteers, with equipment (wheel barrels, shovels, etc.) and materials (sand, topsoil, ground cover plants) supplied, as needed, by the Town of Stoneham.

Project 2: Invasive Plant Removal – Volunteer Project

Costs of Project 2 include uprooting and cutting plants/treating stumps, and placing removed vegetation in plastic bags and disposed of offsite. This project should be undertaken by volunteers, with equipment (clippers, shovels, wheel barrels, plastic bags, herbicide, etc.) supplied, as needed, by the Town of Stoneham.

Project 3: Priority 1 Gravestones & Removal of One Tree - \$6,000 - \$6,500

Costs for Project 3 include treatment of 7 markers. Fees will include documenting the existing condition of each hazardous stone (photographing; documenting material, size location, inscription and condition); providing the appropriate conservation treatment; photographing the stone after treatment is complete; and compiling a treatment report. Fees will also include removal of tree #24 (24" caliper Acer).

Project 4: Priority 2 Gravestones & Removal of Seven Trees - \$30,000 - \$33,000

Costs for Project 4 include treatment of 32 markers. Fees will include documenting the existing condition of each unstable stone (photographing; documenting material, size location, inscription and condition); providing the appropriate conservation treatment; photographing the stone after treatment is complete; and compiling a treatment report. Fees will also include removal of tree #s 12 (18" caliper Acer); 15 (24" caliper Acer); 19 (30" Fraxinus); 22 (18" caliper Acer); 24 (24" caliper Acer); 25A (18" caliper Acer); and 31 (24" caliper Acer).

Project 5: Remaining Removal of Two Stumps and Four Trees & Replanting - \$18,000 - \$20,000

Costs for Project 5 include removal of two tall stumps and four trees and replanting the south and west burying ground edges with an estimated ten new trees. *Note: new tree plantings have been estimated at*

approximately \$1,200 per plant. To minimize the cost of new trees, the Town may encourage donations from interested individuals, made as memorial gifts.

Project 6: Priority 3 Gravestones - \$20,000 - \$22,000

Costs for Project 6 include treatment of 63 markers exhibiting ongoing deterioration. Fees will include documenting the existing condition of each deteriorating stone (photographing; documenting material, size location, inscription and condition); providing the appropriate conservation treatment; photographing the stone after treatment is complete; and compiling a treatment report.

Project 7: Copper Capped Stones - \$11,000 - \$15,000

Costs for Project 7 include treatment of 64 markers that have been capped with copper. Fees will include documenting the existing condition of each capped stone (photographing; documenting material, size location, inscription and condition); providing the appropriate conservation treatment; photographing the stone after treatment is complete; and compiling a treatment report. *Note that the Gravestone Assessment suggests that the town retain five to seven copper capped stones as representative examples. By retaining these, treatment costs will be minimized.*

Project 8: Oriental Court & Pleasant Street Walls and Tombs - \$67,500 - \$70,000

Costs for Project 8 will include cleaning and repointing the walls and tomb facades; restoring/reconstructing the tomb doors; restoring the bronze plaque; erecting new fencing; replacing the concrete step with a granite tread of the same dimensions; and restoring the gate.

Project 9: Pleasant Street Edge - \$23,300 - \$25,000

Costs for Project 9 will include removing the existing "Cape Cod Berm" and bituminous asphalt paving along the length of the Pleasant Street edge, and replacing them with a mountable granite curb and concrete paving, inlaid with granite pavers.

Project 10: Interpretive Sign - \$10,000 - \$12,000

Costs for Project 10 will include design fees (for graphics designer), fabrication and installation of an interpretive sign, to be placed outside the Pleasant Street gate. The cost of the sign will vary, depending on the size and type of materials used.

Project 11: Family Plot Enclosures - \$58,000 - \$60,000

Costs for Project 11 will include removing, cleaning and re-setting granite piers around the Stevens and Gould plots (on gravel or concrete); re-grading around the piers of the Stevens, Gould, Hay and Gerry plots; restoring the Hay fence; and restoring/reconstructing the Stevens fence and gate.

Preservation Resources

The following organizations can supply advice, guidance and technical assistance for preservation efforts in historic burying grounds. Those marked with an asterisk (*) provide financial assistance for preservation activities. Note that funding priorities, award levels and application requirements for the various funding organizations can frequently shift. The Stoneham Historical Commission should contact each resource for up-to-date information, prior to making an application.

The Alliance for Historic Landscape Preservation. The Alliance is an organization of professionals dedicated to the preservation and conservation of historic landscapes in all their variety from formal gardens to public parks to rural and natural expanses. The organization provides a forum for communication and exchange among its members.

The Alliance for Historic Landscape Preservation
www.alhp.org

American Association for State and Local History. This national organization provides leadership, service and support for preservation and interpretation of state and local history, making the past more meaningful in American society. The organization's bookstore offers dozens of titles pertaining to historic preservation.

American Society for State and Local History
1717 Church Street
Nashville, TN 37203-2991
www.aaslh.org

The Association for Gravestone Studies. AGS is a non-profit organization dedicated to the study and preservation of cemeteries and gravestones. Services include publications, a monthly newsletter, quarterly journal and annual conference.

The Association for Gravestone Studies
Greenfield Corporate Center
101 Munson Street, Suite 108
Greenfield, MA 01301
www.gravestonestudies.org

Association for Preservation Technology International. The Association for Preservation Technology International (APT) is a cross-disciplinary, membership organization dedicated to promoting the best technology for conserving historic structures and their settings.

Association for Preservation Technology International
3085 Stevenson Drive, Suite 200
Springfield, IL 62703
www.apti.org

Northeast Chapter:

P. O. Box 20165
Greeley Square Station
New York, NY 10001-0002
www.aptnet.org

Cultural Landscape Foundation. The Cultural Landscape Foundation seeks donations and gifts from corporations, individuals, private foundations and government grants to increase awareness and public benefit for cultural landscapes listed on, or eligible for the National Register of Historic Places. Project support emphasizes interpretation, education, outreach, and public awareness.

Cultural Landscape Foundation
1909 Que Street, NW, 2nd Floor
Washington, DC 20009
www.tclf.org

Erie Landmark Company. This Pennsylvania-based foundry produces cast bronze and cast aluminum plaques and signs, and creating markers for historic properties is one of its specialties. The company also restores historic bronze markers through re-patination and sealing.

Erie Landmark Company
637 Hempfield Hill Road
Columbia, PA 17512
www.erielandmark.com

Heritage Preservation.* This organization works to ensure the preservation of American's cultural heritage, offering programs and publications relating to care of books, documents, architecture, sculpture and other artifacts. Its *Save Outdoor Sculpture!* program is a grass-roots effort to help local organizations preserve sculpture and monuments.

Heritage Preservation
1012 14th Street, Suite 1200
Washington, DC 20005
www.heritagepreservation.org

Massachusetts Cultural Council.* As the state arts agency of Massachusetts, MCC provides grants to organizations in the arts, humanities, and interpretive sciences.

Massachusetts Cultural Council
10 St. James Avenue, 3rd Floor
Boston, MA 02116
www.massculturalcouncil.org

Massachusetts Foundation for the Humanities.* This state program of the National Endowment for the Humanities supports discussion groups, workshops, conferences, lecture series, radio programs, films, and video projects in the humanities.

Massachusetts Foundation for the Humanities
66 Bridge Street
Northampton, MA 01060
www.mfh.org

Massachusetts Historical Commission.* MHC is Massachusetts's state historic preservation office, maintaining the State Register of Historic Places, overseeing all nominations made to the National Register of Historic Places, and providing funding for preservation activities of many types.

Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125
www.sec.state.ma.us/mhc/

National Center for Preservation Technology & Training.* A program of the United States Department of the Interior, National Park Service, the NCPTT awards grants for information management, training and research on technical issues in preservation, with an emphasis on archaeology, historic architecture, historic landscapes, objects and materials conservation and interpretation.

National Center for Preservation Technology & Training
645 University Parkway
Natchitoches, LA 71457
www.ncptt.nps.gov

National Trust for Historic Preservation.* The trust is the leading national advocacy organization for historic preservation, providing funding for preservation-related activities through several programs.

National Trust for Historic Preservation
1785 Massachusetts Avenue, NW
Washington, DC 20036
www.nthp.org

Preservation Massachusetts. This state-wide non-profit organization is dedicated to preserving the state's cultural and historic resources through advocacy, education and community revitalization. In partnership with the Massachusetts Historical Commission, Preservation Massachusetts sponsors an annual meeting – a day-long gathering with symposia and workshops, and an announcement of the Commonwealth's most endangered resources.

Preservation Massachusetts
45 School Street
Boston, MA 02108
www.preservationmass.org

National Preservation Institute. This nonprofit organization provides preservation information, knowledge, and skills to train and guide the stewards of historic and cultural places through seminars in historic preservation and cultural resource management.

National Preservation Institute
P. O. Box 1702
Alexandria, VA 22313
www.npi.org

Society of Architectural Historians, Landscape History Chapter. This membership-based professional organization encourages research in landscape, gardening, and horticultural history, and promotes the dissemination of such research through publications, meetings and lectures. It also provides a forum for the exchange of ideas related to these disciplines through events and programs, and promotes conservation, preservation, and recording of significant landscapes.

Society of Architectural Historians
Landscape History Chapter
1365 North Astor Street
Chicago, IL 60610-2144
www.sahlandscape.org

Stewart Iron Works, Inc. This Kentucky-based foundry has been in operation since the late 1880s, creating cast iron fencing, gates and architectural details. The company maintains an extensive archival library of historic ironwork technical literature and drawings, as well as a collection of historic metal casting molding patterns from which the castings were made. Stewart can also replicate existing historic cast pieces.

Stewart Iron Works, Inc.
30 Kenton Lands Road, Suite B
Erlanger, KY 41018-1874
www.stewartironworks.com

MANAGEMENT

This final section of the *Preservation Master Plan* will help the Town of Stoneham care for the 1726 Old Burying Ground landscape. It includes strategies for care of the plants (trees and ground cover), structures and gravestones, and provides a maintenance schedule. By following this guide, the Stoneham Historical Commission and Department of Public Works (DPW) crews will help ensure the long term health of this important historic resource.

Management Log

Before the Town begins caring for the landscape, the Commission and/or DPW should set up a “management log,” or ongoing written record of inspections, repairs, and introductions of new features, listed by date. The log should include methods and materials employed, as well as names and contact information for any specialists employed in the burying ground’s care. The log should be stored, in both electronic and manual formats, in a secure location within the Town.

Plants

Existing Plants: Trees

As noted in the *Recommendations* section, before the Town undertakes any measure to treat the property’s trees, it should consult a tree specialist, and preferably a Massachusetts-certified arborist. This individual is trained to assess the health of aging plants and prescribe appropriate care. General guidelines for tree care are as follows:

- Once per year in late winter, consult an arborist about the general health of the trees. Ask the arborist:
 - If any of the trees or branches are dead, broken or in any way hazardous. These need to be removed as soon as possible for safety.
 - If the trees are free of disease, and if not, how the disease should be treated.
 - If the diseased branches/sections of the tree should be removed, or if the entire tree should be removed to protect the health of neighboring trees.
 - If the trees need fertilizing, and if so, what they should be fed, how they should be fed, and how often they should be fed.
 - If root suckers or other growth should be removed to ensure the health and beauty of the tree.
- Test the burying ground’s soil for quality in relationship to the tree population. The test will detect any soil deficiencies, and determine a remedy for correcting them. Soil can be tested by a soils professional, or through the University of Massachusetts Extension Program, located in Amherst.
- Provide and install cables to help any weakly-joined limbs.

- Treat trees with a systemic insecticide to minimize stress caused by leaf feeding pests.
- Prune trees, removing all dead wood greater than ½” in diameter.
- Create mulch rings around the base of each tree, as wide as possible and up to the diameter of the tree crown. Shape the rings into saucers (with the low point at the center), rather than volcano-like mounds. In places where gravestones lie near or adjacent to trees, avoid accumulating mulch around the stones.
- Where soil has built up at the base of trees, remove enough to expose the root collar.
- Remove any dead or dying trees.

Existing Plants: Ground Covers & Turf

The burying ground contains several perennial ground covers, mixed in with turf, and these cast an array of colors and textures throughout the landscape. Species include *Ajuga*, *Sedum*, *Waldsteinia*, and *Stachys*. The Town should make an effort to retain and encourage the ground covers’ growth, as they minimize the need for mowing, cutting down on maintenance tasks. Each should be allowed to bloom, wither, and cast their seeds before they are mown, allowing them to multiply. Weed killers and other such herbicides should not be used where these plants are growing (some species may be classified as “weeds”).

As long as the burying ground contains turf, the Town may use the following mowing and fertilizing guidelines:

- Fertilize sparingly, as too much fertilizer can cause grass to grow too rapidly, requiring more mowing and making the plants more susceptible to disease. Not enough fertilizer can result in weaker plants that are more susceptible to disease or stress brought on by drought.
- Apply fertilizer three times per year – around Memorial Day and Labor Day, and finally, around Halloween.
- Do NOT fertilize in mid-summer. At this time of year, roots have become dormant. Fertilizer will cause the leaves to grow, making the plants less tolerant of drought, heat and disease.
- Follow these fertilizing instructions:
 - *Memorial Day* – apply 1 pound of Nitrogen per 1,000 sf (with 50% of Nitrogen slow-release). Use an N:P:K Ratio of 14-14-14.
 - *Labor Day* - apply 2 pounds of Nitrogen per 1,000 sf (with 50% of Nitrogen slow-release). Use an N:P:K Ratio of 14-14-14.
 - *Halloween* - apply 1 pound of Nitrogen per 1,000 sf (with 75% of Nitrogen slow-release). Use an N:P:K Ratio of 28-3-9.
- When mowing, remove no more than one-third of the height of the turf at one time, always leaving twice as much leaf height as is cut.

- The best level for mown grass is 2 ½ inches, with 2 to 3 ½ inches the range.
- It is best to mow lawns on an as-needed basis, not on a regular schedule, such as once per week.

New Plants: Trees

The *Recommendations* section of this plan includes an effort to plant new trees within the burying ground, and near the south and west property lines. In selecting new trees to plant, the Town should aim to diversify the tree species within the burying ground while, at the same time, choosing species appropriate for the period of significance, including trees native to southern New England. The following is a list of appropriate tree species (native species are marked with asterisks):

<i>Fagus americana</i> *	American Beech
<i>Liquidambar styraciflua</i> *	Sweetgum
<i>Liriodendron tulipifera</i> *	Tulip Tree
<i>Picea abies</i>	Norway Spruce
<i>Picea glauca</i>	Black Spruce
<i>Sophora japonica</i>	Scholar Tree

Newly planted trees are unlikely to survive if they do not receive special care and attention, particularly in the first few years after planting. In general, adhere to the following care guidelines:

- Plant in the spring or fall, and never during the heat of summer.
- Utilize Town crews under the supervision of a Massachusetts-certified arborist, or hire a landscape contracting company to plant trees and shrubs. Trees and shrubs that are planted correctly will be far more likely to survive and thrive, and the arborist/landscape company should exercise the best tree planting practices. Landscape contractors should guarantee all trees and shrubs for one year after planting. However, *the guarantee is valid only if the plants have been properly cared for.*
- If staking new trees is necessary, be sure to remove stakes and guy-wires within one year of planting. If the trees appear to need some kind of individual protection because of their location, build a simple fence rather than leaving the guy-wires on. Wires can damage and will eventually kill the tree if left in place too long.
- Provide the trees and shrubs with at least one inch of water each week. This water can be supplied by rainfall or by supplemental watering. Spreading one inch of water using a hose attached to an exterior water spigot takes approximately two-three hours. Water must soak deep into the soil to encourage good root growth and overall plant health. Adjust the flow of water so it has time to sink into the ground, reducing the pressure if small “rivers” develop. The water should sink into the ground around the tree or shrub, rather than flowing away.
- If drought dominates the fall, be sure to water trees and shrubs well before the ground freezes, protecting the plants from entering winter in dry soil.

- Mulch plants to help control weeds and keep moisture in the soil (and maintain a neat appearance in the landscape). Use composted pine bark mulch that has been aged a minimum of three months. Apply the mulch to a depth no greater than three inches. Each spring, fluff the existing mulch and add more, as needed. Keep mulch away from the stems or trunks of trees and shrubs, and off shrub branches (to minimize decay and prevent insect infestations).
- Prune trees and shrubs to enhance their natural form and appearance, and to help maintain their health. Enlist the expertise of a professional or person trained in proper pruning practices. Prune only by hand (never use electric pruners). Prune broken branches immediately to prevent disease.

New Plants: Ground Covers

As previously mentioned, ground covers add beauty to the burying ground landscape and minimize the need for mowing. In shady areas, the Town should select shade-tolerant species, indicated by asterisks (“*”), below. When planting atop a sunken grave, the Town should select taller species, indicated by “T.”

<i>Ajuga reptans</i>	Bugleweed
<i>Arctostaphylos uva-ursi</i>	Bearberry
<i>Asarum canadense</i> *	Wild Ginger
<i>Cornus canadensis</i> *	Bunchberry
<i>Erythronium albidum</i> *	White Trout Lily
<i>Fern</i> spp. (T)	Ferns
<i>Gallium odoratum</i>	Sweet Woodruff
<i>Hemerocallis</i> spp. (T)	Daylily
<i>Houstonia caerulea</i>	Bluets
<i>Lamium</i> spp.	Dead Nettle
<i>Phlox stolonifera</i>	Creeping Phlox
<i>Phlox subulata</i>	Moss Pink
<i>Sedum</i>	
<i>sp. reflexum, sp. caudicicola,</i>	
<i>sp. anglicum, sp. brevifolium</i>	
<i>Thymus serpyllum</i>	Creeping Thyme
<i>Viola canadensis</i> *	Canadian Violet
<i>Waldsteinia ternata</i>	Barren Strawberry

Control of Invasive Species

As noted in the *Landscape Assessment* and *Recommendations* sections of this plan, the burying ground contains at least three plants classified today as invasive species: *Acer platanoides* (Norway Maple); *Celastrus orbiculata* (Asian Bittersweet); and *Alliaria petiolata* (Garlic Mustard). The Town should make a concerted effort to remove and control re-growth of these plants, as they rapidly and aggressively spread, pushing out native and other desirable species. Each of the plants is described and pictured below, and control methods for each are outlined.

Acer platanoides (Norway Maple)

Norway Maple is native to Europe and Western Asia, and was introduced in the United States as an ornamental landscape plant. It reproduces prolifically in forests, fields, and other natural habitats, forming dense shady stands and displacing native trees and shrubs. The tree has smooth, grey bark that becomes furrowed with age, and its leaves are dark green. The leaves have little or no fall color, which is one of the easiest ways of distinguishing it from the brilliant orange-colored sugar maple, or bright crimson-colored red maple.



Norway maples spread by sending their mature fruits, or “samaras” through the wind. Small seedlings may be uprooted from the ground by hand, and small and large trees can be cut to the ground level. An application of glyphosate (Roundup) or triclopyr (Garlon 3A or Farlon 4) herbicide can also help control. The best means of control, however, is simply not planting them.

Cerastus orbiculata (Asian Bittersweet)

Asian Bittersweet is a deciduous, woody perennial vine native to Eastern Asia. It was introduced in the United States as an ornamental plant and is still widely planted and maintained as an ornamental vine. Its leaves are rounded and glossy and it produces clusters of small greenish flowers. Mature plants produce green to yellow fruits which split open to show red-orange seed sacs (“arils”). Many people cut the vines containing the fruits to make floral arrangements and wreaths. While attractive, the cuttings promote further spread of the vines. The plant also spreads through root suckering, and a crop has taken root at the southeast corner of the burying ground where it has begun to consume the chain link fence.



The most successful means of controlling Bittersweet is through a combination of manual, mechanical and chemical applications. Small patches of the plant can be pulled manually, or cut to the ground. When cut, the stems must be treated with an herbicide to control re-growth from the stem area. Chemicals, including triclopyr and glyphosate, can be applied (sprayed) to larger masses of Bittersweet. This should be done in the late summer or fall, so impacts to native plants and animals are minimal.

Alliaria petiolata (Garlic Mustard)

Garlic Mustard is a biennial herb native to Europe, and colonies of the plant have spread along the west and south burying ground property lines. It typically invades partially-shaded forested and roadside areas. Its seeds germinate in early spring, and the new plants develop basal leaves, in a rosette pattern, during the first year. Between late April and June of the following year, it produces white flowers. Later in the summer, it produces seeds which mature and disperse, and then die. The seeds can remain viable for up to five years.



Methods of controlling the spread of Garlic Mustard include *hand-pulling*, *cutting*, and application of *herbicides*. The plants can be *hand-pulled* at any time, but if pulled when their seed capsules are present, the plants should be bagged. Once pulled, the soil should be firmly tamped down to prevent other dormant seeds from emerging. *Cutting* may be performed in late spring and early summer and if cut at ground-level, the plants will be completely eradicated. However, repeated cuttings may be necessary, as dormant seeds may germinate and produce new plants. Cutting should be done for a minimum of five years, or until the plant has disappeared. *Herbicides*, including glufosinate-

ammonium and glyphosate, may be applied to the plant seedlings, prior to flowering. This will eliminate seed production, and therefore stop the spread of the plant.

No Shrub Policy

To minimize maintenance and preserve the burying ground's 18th and 19th century character, the Town should adopt a "no shrub policy," prohibiting the addition of shrubs and small trees to the landscape. Shrubs form masses and quickly become unmanageable, blocking views, obscuring gravesites, and catching litter. Instead, the Town should concentrate on adding tall shade trees to the interior, and evergreen trees to form screens at the south and west edges.

Structures

The *Landscape Assessment*, *Recommendations*, and *Engineering Assessment* sections of this plan detail individual approaches to treating the structures at the Old Burying Ground, including the retaining walls, tombs, and plot enclosures. In general, however, the Town can implement the following management methods to prevent further deterioration:

- Clear volunteer tree, shrub and vine growth from around the walls. Allowing these to grow in and around these structures not only contributes to their decay, it creates an overall unkempt appearance, making the structures appear abandoned.
- Inspect the structures twice yearly for deterioration, such as cracking, leaking, or leaning. If deterioration is detected, consult a structural engineer or historic masonry restoration specialist to perform an inspection. Under no circumstances should Town crews and/or volunteers attempt to correct deterioration problems. For a list of stone masonry conservators, contact the Massachusetts Historical Commission at 617-727-8470.

Metal Work

The Old Burying Ground contains historic metal plot fencing, steel tomb doors (the Green tomb contains an application of cast iron in bas relief), and a steel picket gate. In addition, the *Recommendations* section of this plan calls for erecting an ornamental iron (tubular steel) fence atop the Pleasant Street and Oriental Court retaining walls, replacing the aging chain link. The Town should take the following measures to ensure a longer life for these historic, reconstructed, and newly-placed metal features.

- Maintain detailed records of all maintenance measures including inspections, routine care, and repair type.
- Inspect metal work twice yearly (in the spring and fall), looking for missing elements, fractures, weaknesses in the finish, structural damage, and surface dirt.
- Report any problems to an historic metals specialist, who can determine the appropriate treatment. For a list of qualified metals conservators, contact the Massachusetts Historical Commission (telephone number listed above).
- For simple treatments, such as removal of superficial dirt, wash the fences/gate/doors with low-pressure water. Always test the washing method (including water pressure) on a small obscure piece of the structure, prior to removing all the dirt.
- When touching up areas where paint has been removed, follow instructions provided by an historic metals specialist for touch up of the metal work.

Gravestones

A complete assessment of the burying ground's 490 grave markers, including 344 headstones and 146 footstones, was completed as part of this *Preservation Master Plan*, a copy of which appears in *Appendix C* of this document. As the assessment illustrates, treatment of gravestones and monuments must be approached carefully, and carried out by trained professionals only. Under no circumstances should untrained individuals attempt to repair grave markers, as improper treatment of stones can lead to further deterioration. Conservation professionals will employ treatments that help stabilize the stones for many, many years, however because the stones lie exposed to weather and are vulnerable to vandalism, further deterioration is always possible. Should further damage occur, the Town should consult a stone conservation specialist, before undertaking any type of repair.

Vandalism

The burying ground's location within an urban environment makes it vulnerable to vandalism. Two forms of vandalism are most apt to occur, destruction of features (walls, fencing, gravestones) and defacement, caused by the application of graffiti. The following measures should be taken to help minimize these forms of vandalism:

- *Develop a plan for reversing acts of vandalism, immediately after they occur.* If damaged stones, fencing or walls remain unrepaired or covered with graffiti, they make the burying ground appear neglected, and neglect invites more vandalism. By making needed cosmetic repairs immediately, vandals will understand that the burying ground is under watch, and thus avoid repeating their efforts.
- *Promptly remove graffiti from walls and other features.* Removal of graffiti from historic metal and masonry structures requires knowledge of stone and metal properties, as well as cleaning methods and materials, and should not be carried out by untrained individuals. For detailed information about graffiti removal, refer to the National Park Service's Technical Preservation Services [Preservation Brief #38, Removing Graffiti from Historic Masonry](#) (available through the National Park Service website).

- *Prohibit gravestone rubbing*, as this activity can erode the stone, along with its inscription, causing irreversible damage.
- *Institute a community watch program*, consisting of burying ground neighbors and other interested volunteers, to provide continual surveillance of the property. Any acts of vandalism should be reported to the Town of Stoneham Police Department when they occur.
- *Maintain a locked gate*. While this will limit the number of visitors to the burying ground, it will allow the Town of monitor visitation and control vandalism.

Management Resources

Culina, William, Native Trees, Shrubs & Vines. Framingham, MA: The New England Wildflower Society, 2002.

Dirr, Michael A., Dirr's Hardy Trees and Shrubs, An Illustrated Encyclopedia. Portland, OR: Timber Press, 1997.

Favretti, Rudy J. and Joy Putman Favretti, Landscapes and Gardens for Historic Buildings, Second Edition. Nashville: The American Association for State and Local History, 1991.

Mack, Robert C., AIA and Anne E. Grimmer, Historic Preservation Brief Number 1, Assessing Cleaning and Water Repellant Treatments for Historic Masonry Buildings, US Department of the Interior, National Park Service, 2000.

Mack, Robert C., AIA and John P. Speweik, Historic Preservation Brief Number 2, Repointing of Mortar Joints in Historic Masonry Buildings, US Department of the Interior, National Park Service, 1998.

Strangstad, Lynette, A Gravestone Preservation Primer. Nashville, TN: The American Association for State and Local History, 1988.

Management Schedule

January - March	<ul style="list-style-type: none"> ▪ If removing snow from the burying ground's front step, minimize (or eliminate altogether) the use of salt.
April	<ul style="list-style-type: none"> ▪ Inspect the walls, tombs, iron work and gravestones for damage that may have occurred over the winter. Consult a specialist about repairing any major damage. ▪ Remove leaves from inside the burying ground walls and fence
May	<ul style="list-style-type: none"> ▪ Inspect trees for damage that may have occurred over the winter and note any needs for pruning and removals. ▪ Begin mowing turf on an as-needed basis to a height no less than 2-1/2 inches. ▪ Around Memorial Day, fertilize turf areas (14-14-14). ▪ Plant new trees and groundcovers, as required.
June	<ul style="list-style-type: none"> ▪ Conduct pruning and removals of trees. ▪ Continue mowing turf on an as-needed basis to a height no less than 2-1/2 inches. ▪ Continue to plant new trees and groundcovers, and grassy areas, as required.
July	<ul style="list-style-type: none"> ▪ Continue mowing turf on an as-needed basis to a height no less than 2-1/2 inches. Suspend mowing during hot, dry periods.
August	<ul style="list-style-type: none"> ▪ Continue mowing turf on an as-needed basis to a height no less than 2-1/2 inches. Suspend mowing during hot, dry periods. ▪ Around Labor Day, fertilize turf areas (14-14-14).
September	<ul style="list-style-type: none"> ▪ Continue mowing turf on an as-needed basis to a height no less than 2-1/2 inches. ▪ Resume planting of new trees and groundcovers, and lawns, as required ▪ Inspect walls, tombs, iron work and gravestones for damage that may have occurred over the summer. Consult a specialist about repairing any major damage.
October	<ul style="list-style-type: none"> ▪ Around Halloween, fertilize turf areas (28-3-9).
November - December	<ul style="list-style-type: none"> ▪ If removing snow from around the burying ground's front step, minimize (or eliminate altogether) the use of salt.

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